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ABSTRACT

This publication contains an evaluation of the Architectural Heritage Education Project, a 3-year project which used local architecture as a resource for teaching the arts and humanities at the secondary level. The project involved 25 Massachusetts high school teachers in art, social studies, industrial arts, and the language arts working with project staff. Participating teachers attended two week-long summer courses. Then, during the school year, they integrated the subject of architecture into their courses. There are three main parts to this evaluation report. Part I, the "Case Study," gives an account of two teachers' participation in the program. Part II contains interviews with eight second-year teachers. These teachers had integrated architecture into social studies, art, language arts, and industrial arts courses. Questionnaires were sent to 15 other program participants to collaborate the findings of the interviews. The third part of the report contains teachers' responses to these questionnaires. The report concludes with a summary of findings. The results, overwhelmingly positive, indicate that the project is an outstanding example of inservice teacher education and make it clear that architecture as a teaching tool has great potential for high school instruction in general. The results suggest, however, that a basic course and some form of on-site support for ideas, materials, and feedback are necessary for a program such as this to be successful. Interview questions are appended. (RM)

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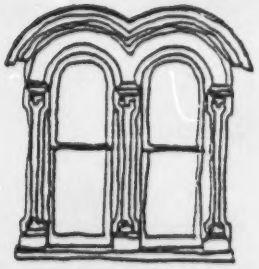

ARCHITECTURAL HERITAGE EDUCATION
AN EVALUATION REPORT

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SP014091

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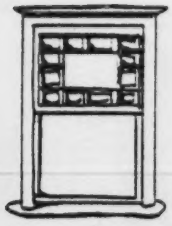
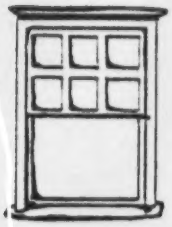


FOREWORD

The following report is an evaluation of a statewide pilot educational program in Massachusetts, *Architectural Heritage Education*, which was carried out from July 1979 to July 1982. The evaluation was conducted 2½ years into the project.

Following the Introduction, the body of the report is divided into three parts in order to supply both qualitative and quantitative information—to include both breadth and depth. First, the Case Study, which gives an account of two teachers' participation in the program, is meant to convey the quality of the program in some depth and its meaning to those involved, in one setting. The next part, based on interviews with second-year teachers, echoes some of the same themes, giving them both broader and more varied reference. The third part, a summary of the questionnaires administered to the first and third-year teachers, gives a picture of some of the overall responses to the project by the remaining two-thirds of the teachers. The final section of the report contains findings restated in summary form.

Data for the report came from individual interviews (1½-2 hours each) with all the second year teachers, questionnaires from first and third year teachers, individual interviews with field coordinators and documentation provided by the Architectural Heritage Education staff.



INTRODUCTION

THE ARCHITECTURAL HERITAGE EDUCATION PROGRAM

BACKGROUND AND GOALS

Architectural Heritage Education is a three-year pilot program in secondary education sponsored by the National Endowment for the Humanities (NEH) and administered by the Office of the Massachusetts Secretary of State, in cooperation with the Massachusetts Historical Commission. Funding for the project is provided by NEH, the State Secretary's Office, and in-kind support from twelve Massachusetts school systems.

The program provides a structure for collaboration between high school teachers and heritage educators in finding ways to use local architecture as a teaching tool. To encourage broad applicability of the project results, a wide range of existing courses as well as students, community and school settings were involved in the pilot project.

Architectural Heritage Education began in July, 1979 with three goals: 1) to enable students to develop an understanding of social history through an examination of and appreciation for the historical architectural resources of their communities; 2) to assist students in understanding how this history, as evidenced in their own communities, affects their personal lives; 3) to create a process for collaborative efforts among schools, community leaders and educators.

These goals were expanded and refined as the program evolved to include the expectations and needs of all participants. More specifically, in the program's structure teachers were to play an important role as curriculum designers with sole responsibility for the project's classroom applications. During implementation, the goals gradually expanded to reflect curriculum considerations as they relate to teachers and to the content of a broad range of academic courses.

PARTICIPATION

Architectural Heritage Education is a collaborative effort involving high school teachers of social studies, art, industrial arts, and language arts —their students, schools and communities, and a five-member program staff.

Teachers/Students/Schools/Communities

A total of 24 teachers and over 2,000 students from Massachusetts high schools have participated in the three-year pilot project. Eight teachers joined in July 1979 at the start of the program; eight additional teachers were chosen as participants from a pool of applicants in July 1980; a final eight were selected in July 1981.

Twelve high schools in urban, suburban, small town and rural settings are represented in the pilot group. Over 150 community residents have participated directly in the project as members of committees affiliated with the program. Others have been involved through parent-teacher organizations, adult education classes in Architectural Heritage Education, and presentations by teachers to community groups.

Architectural Heritage Education has been implemented in 37 different high school courses: twenty in social studies, eleven in art, five in language arts, one in industrial arts. (A list of courses, teachers, schools and communities is appended.)

Administrative Staff

The project's five-member administrative staff consists of: 1) the director, with a background in historic preservation; 2) the materials developer, experienced in curriculum and publications design; 3) two field coordinators with graduate credentials in American history and architectural history; 4) an administrative assistant, with teaching certification. In addition, an advisory committee from the areas of education, historic preservation, and design has met to review the project.

COMMUNICATION

The AHE project is structured as a collaborative effort involving teachers, students, school administrators, community residents, and program staff. The primary focus of this network has been the interaction between teachers as curriculum designers and the project's staff as a source of information on architectural topics and themes.

Teachers participating in Architectural Heritage Education design their own architectural applications, tailoring them for their subject, students, course objectives, teaching methods, and community settings. Teachers selected the courses for which they would adapt architectural material and chose how and when to integrate architecture with their subject. They were able to use materials on architectural topics, prepared by the staff as needs arose. These include a handbook for identifying Massachusetts architectural styles with line drawings of common style types, sets of prototypical house plans, and slides of architectural examples.

During the program the staff and teachers worked together in several ways:

Preparation

Each incoming group of teachers took a two-week summer course designed and taught by the staff with assistance (after year 1) from teachers who had graduated from past sessions. The course curriculum followed a chronological format, emphasizing visual skills for categorizing buildings by style and date, and an interdisciplinary study of architecture by theme (social interactions, design considerations, and historical context).

On-site Follow Up

During the fall and spring semesters, the two field coordinators visited schools weekly, semi-monthly or monthly according to the length of time teachers had worked with the program. These visits involved planning, documenting and reviewing all lessons and activities with architectural themes, as part of the program's formative evaluation. The field coordinators also provided information and resources—books and slides—to assist teachers in planning architectural lessons.

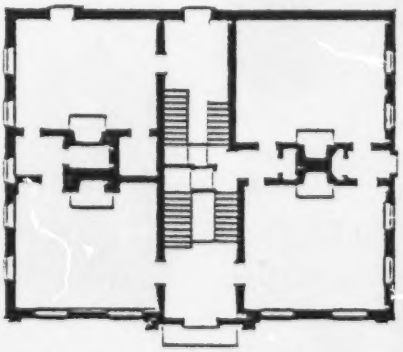
Teacher/Staff Meetings

Every fall and spring all participants met to discuss future directions and share their experiences with their students. These semiannual reunions were initiated in January 1980 in response to requests from teachers for program-wide evaluation sessions.

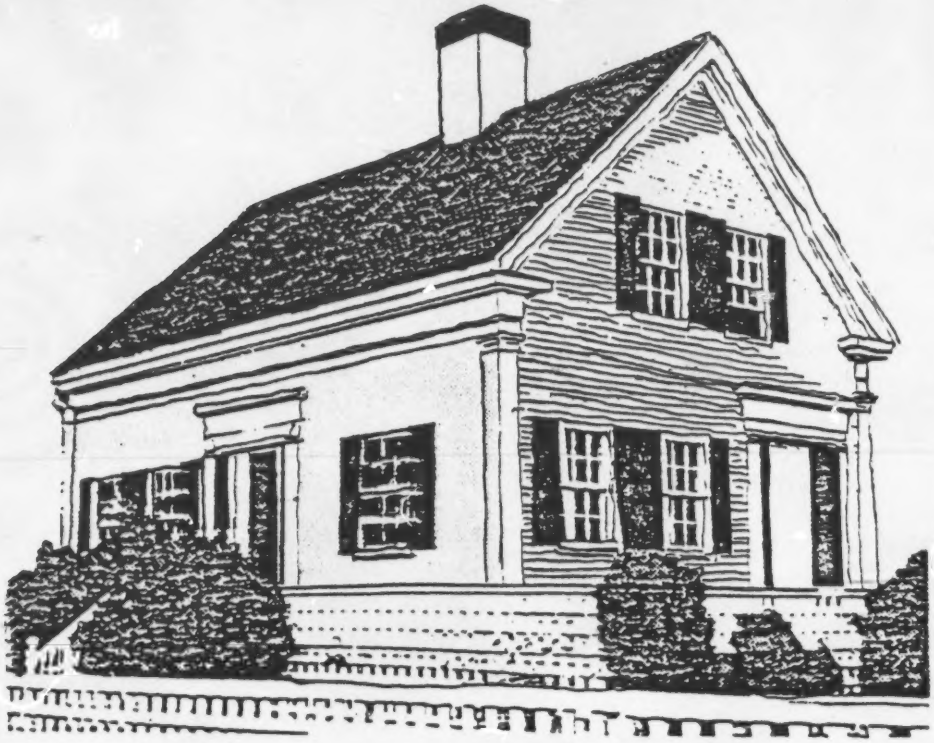
Formative Evaluation

From the beginning of the program, the staff stressed the importance of feedback from the teachers on the effectiveness of the program. Teachers were encouraged to identify their own interests and to develop methodologies appropriate to their own settings and teaching styles. Detailed notes and records were kept by field coordinators and teachers documenting classroom implementation, student response and teacher needs. Pre- and post-tests and questionnaires were administered to students to determine cognitive gains in, as well as affective attitudes toward, the architectural component. On- site student interviews were conducted at the end of each academic year.

Field staff met weekly with the project director and materials developer to discuss the classroom observations, documentation and teacher conferences. Teacher and student responses were used to strengthen particular aspects of the program's implementation —teacher recruitment, summer course curriculum, materials for classroom use, field assistance, meeting agendas and dissemination.



Formal plan



PART ONE
CASE STUDY
ARCHITECTURAL HERITAGE EDUCATION

RATIONALE

This case study of two teachers' participation in the *Architectural Heritage Education* project describes one successful experience. By focusing closely on the program as implemented in one particular setting we mean to convey something of its unique quality and potential significance to students and teachers. A number of other settings and teachers could equally well have served to illustrate the program's value.

We assume readers will extend their own understanding through employing their imaginations and by reading the other sections of this report, and that the portrayal of one program implementation in more concrete detail will add a useful dimension to their understanding of the other twenty-two.

The information for this case study is drawn from program documentation and evaluation activities: recorded class sessions, pre-post tests, interviews with field coordinators, teachers and students, course data (schedules, notes on content, materials, handouts, etc.) and recorded presentations by students and teachers.

THE ARCHITECTURAL HERITAGE EDUCATION PROGRAM IN STOUGHTON

Background

At the time the possibility of participating in *Architectural Heritage Education* was brought to the attention of Jim Gormley and Judy Hamilton at Stoughton High School, in the fall of 1979, they had each been teaching at the school since 1970. In 1975, Judy, a language arts teacher, and Jim, a social studies teacher (also qualified to teach psychology, history, sociology), along with several other faculty members, had decided to collaborate in developing an American Studies program, then and still a relative rarity in pre-college studies.

Supported in their plans by the school administration as well as assisted financially and technically by a series of grants (National Humanities Faculty, National Endowment for the Humanities) which they received individually or as a team—Judy and Jim developed a comprehensive, year-long integrated course for juniors. The course was offered as an elective on a first-come, first-served basis and immediately attracted a "broad mix of average college and non-college students." —*Jim* It met the requirements for 11th grade English and American history, was original, quite different in format from most of the high school academic courses.

The course met for two consecutive periods daily and students were asked to do project work, long-range assignments, independent research and oral presentations. They also had the opportunity to spend learning time outside of class: in the library, in the town of Stoughton, on field trips to other sites, communities and museums, as well as an annual trip into Boston.

The Stoughton Community

Stoughton is a moderate-sized town located south of Route 128 but still within commuting distance of Boston. It shares the history of many New England communities, having developed from a small rural village in colonial and post-Revolutionary times to an industrial town in the 19th century, the location of straw hat and boot factories.

Industrialization brought successive waves of immigration: Irish, Lithuanians, Portuguese and, more recently, Jews and Blacks. Lately, the dominantly blue-collar population has been changed by an influx of middle-level management and professional people who commute to Route 128 or to Boston proper.

Stoughton High School, with a student population of about 1800, reflects both the history and present population of the community, which, in spite of its proximity to the city, retains something of a village feeling. Most of the high school students are quite unfamiliar with the cultural resources of Boston (except, perhaps, Quincy Market).

Introduction to Architectural Heritage Education

In November, 1979, when the chairperson of the social studies department at the high school received materials in the mail describing the *Architectural Heritage Education* program, he asked the six American studies teachers if they were interested in participating. Judy and Jim responded positively.

By this time, their course in American Studies was well developed and already included literature, history, sociology, some art history and music and spanned American civilization from colonial times to the present. It seemed natural to Judy and Jim to learn about and incorporate architecture as well, even though neither of them had much background in the field. Judy had studied European architecture a bit in a college art history course; Jim had even less knowledge of architecture.

They applied to the program in January, were interviewed and then accepted as members of the second year group in April and made plans to attend the initial two-week training course to be held during the second half of August.

The Summer Course

The summer course in the Boston area, to which Judy and Jim commuted daily, from their own homes (Needham and Norwood) turned out to be a stimulating experience both personally and educationally. The course consisted of lectures, visual presentations, written materials and group discussions, and was well balanced to convey both basic information and concepts.

"It was great . . . it [gave] you different perspectives. It was fascinating to listen to Joe [a teacher from Springfield] talk about art. There was an awareness that we could learn from each other . . . also time to think." *—Jim*

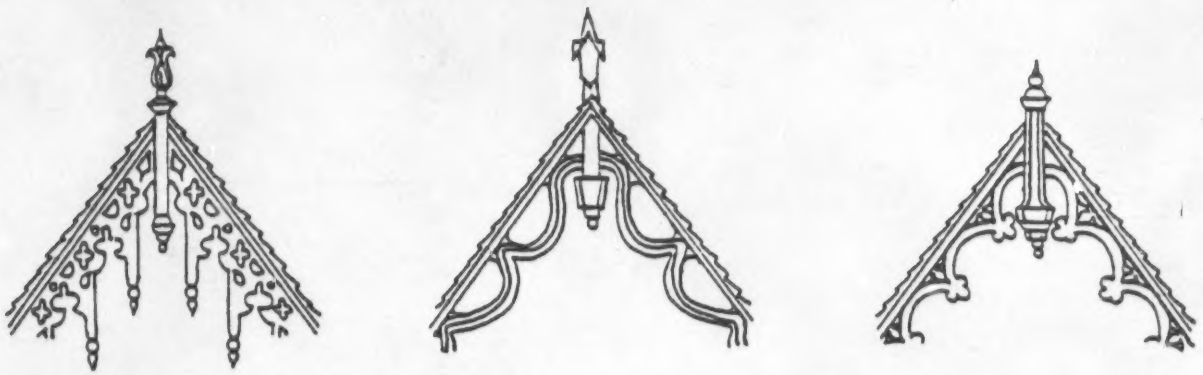
They valued "learning how to look at a building, recognizing basic vocabulary and clues . . . the series of discussion groups on ways to integrate the material. We talked about concepts, then everyone could think about specifics." *—Judy*

The teachers also appreciated the staff's professional knowledge, the intelligent organization of the course content and the fact that specific applications for use in the school were not pre-designed; each teacher or team of teachers was encouraged to apply what they learned about architecture to their own disciplines in the context of their own settings. The eight teachers, in fact, represented almost as many academic fields.

Judy and Jim finished the two weeks feeling as though they had "lots of ideas" and they were eager "to sift through them to get started . . . felt stimulated." *—Judy*

Field Coordinator

The first year Judy and Jim integrated architecture into the American Studies course at Stoughton High School, they were closely supported by a field coordinator, Greer Hardwicke, who visited class weekly, kept detailed documentation on their activities and assisted immeasurably as a resource person, "getting materials, being a sounding board for ideas, and evaluation leading to planning, helping them reflect on what they were doing." *—Greer*



"She takes all the local photographs and gets examples from other communities along with finding books. She [helped] keep our attention focused on continuing to develop the materials . . . she got to know our students and clued into any problems going on in the school, community and classroom." —*Judy* Perhaps most important, the two teachers had an interested and knowledgeable person from the outside who cared about how their course was going.

The second year these teachers participated in the project the field coordinator spent less time with them, not through lack of interest but because the need for support was greater on the part of teachers new to the project.

American Studies

The American Studies course at Stoughton High covers an enormous amount of material both longitudinally (almost 400 years) and latitudinally (American history, sociology, literature, art, music, architecture). It would have been easy to present the material chronologically, the traditional way of organizing history courses which have been, also traditionally, boring and easily forgotten. The American Studies course though, had been organized thematically as well as chronologically and now architecture was added to supply concrete symbols for those themes.

"Each time that we introduce a new unit, we use architecture to introduce or summarize." —*Judy* Architecture as symbol not only provided the connecting web among disciplines but also between academic study and the outside world of the students' lives. One example will illustrate the point.

In the late fall, the class looked at and analyzed the *Gothic Revival* style in American architecture, through slides, drawings, lectures, class discussions, and a field trip. At the same time they read stories by Ambrose Bierce and Edgar Allan Poe, discussed Gothic/Romantic ideas in literature and social history, contrasted 19th century Romanticism and Realism in art. The teachers ended the unit with a double period review and discussion of the *Gothic Revival* style, and "connected it to the Romantic movement in literature and its historic time frame. They were able to see connections between what they were reading, the historic movements and literature." —*Judy*

Examples of *Gothic Revival*, of course, are still standing in the Stoughton of today and thus provide, for these high school juniors, tangible evidence, embodying symbols, of their culture's past. "The reason we keep these old buildings is it's our only means to keep in touch with the past. Do you know the work and time, and skill that went into these homes!" —*Student paper*

The American Studies course proceeded in similar fashion from Puritanism and pre-Revolutionary America, through the Revolution, Westward Movement, 19th century industrialization, immigration, Civil War to 20th century America and the present, periods symbolized by the successive styles of *First Period*, *Georgian*, *Federal*, *Greek Revival*, *Gothic Revival*, *Italianate*, *Mansard*, *Richardsonian Romanesque*, *Queen Anne*, *Shingle*, *Colonial Revival*, *Neoclassical*, *Bungalow*, *Cape*, *Ranch*, and *Contemporary Suburban*. Each style was logically and aesthetically related to the cultural themes of the period in which it flourished.

OUTCOMES OF AHE IN STOUGHTON

Student Response

Although the actual sequence and goals of the American Studies course remained basically unchanged, the new element, architecture, increased its appeal to students and gave the course immediate reference by making use of the local scene. "We took kids out of school quite a bit —to the library, Town Hall, Historical Society and I think that appealed to the kids —a little more action." —*Jim*

Local groups like the Historical Society responded favorably to students' interest by providing information and references. "Looking at old maps gave kids a sense of how the community developed. Looking at styles of houses gave kids a sense of history. The interiors reflect family patterns, roles and how they change." —*Jim* "Back in the 1800's, Stoughton was a town which many people traveled through. One of the first things [built] would have been the railroad station —Stoughton was then developed around it starting with the center. Since this could be the old part of the town, many *Greek Revival* houses were built there." —*Student*

American history and culture took on new immediacy and personal meaning for students. "I never anticipated the high student interest and involvement." —*Judy* "I really didn't like history cause I thought it was boring but in this course we go on a lot of field trips just to study houses and stuff and you learned a lot right offhand. So when you're walking down the streets with your friends or something you can just say 'Oh, I know what kind of house that is' and just pass it on like that." "I like it because it is better than studying straight from books and stuff." "When you go to college, let's say, and you have to do a report on something—it's history and you're doing a report on factories or whatnot—you can always relate back to it. Or when you're getting older in life and looking for a house, you might have something in mind you want to look for in particular." —*Students*

Students' immediate pleasure in their new ability to recognize elements in the man-made environment was extended and deepened by the demands made by the course. They were asked to examine the implications of the styles, see the logic of the development from one to the next, make connections with styles in other parts of the country (early dwellings in the American West, for example).

Benefits for students

There were several clear benefits from the inclusion of architecture in the American Studies course.

Stereotyping of students' academic ability was, to some extent, broken down. Students who were not verbally adept were frequently visually acute, able to "read a building" as well as or better than the honors students in the class.

Students gained a new awareness and appreciation of their own community, its past and present, an appreciation which was frequently reciprocated by their parents and members of the community. Several students did original research into Stoughton history and made presentations to local groups.

Both Judy and Jim felt that the course made possible a new relationship between them and their students. "Because we're looking at a building, the students don't see me as the authority—there is a more balanced exchange. It breaks down that barrier between students and teachers."—*Judy*

By the same token, students were able to see teachers as lifelong learners and that learning can be fun, perceptions which may have profound implications for their own lives.

As indicated above, students made more connections between their in-school and out-of-school lives, thus giving more meaning to each. "It has made me think more about how to make connections in relating things to students' lives. The students are more involved when they look at a local building."—*Judy*

In a sense, all of these benefits add up to the same thing: breaking down the barriers between school and the world, a most appropriate approach for the education of young adults.

There were also a number of concrete, academic benefits for: writing skills ("It has been helpful for the students to have a visual connection for writing assignments"—*Judy*); required familiarity with the general chronology and content of American history; increased vocabulary and reading comprehension; development of cognitive and analytic skills.

Benefits for Teachers

The American Studies course with the addition of architectural education had implications for the two teachers, Judy and Jim, as well. Both feel that their new awareness, knowledge and appreciation of the built environment has added interest to their out-of-school lives. "Aesthetically I'm more appreciative of certain shapes and forms."—*Jim* "Intellectually stimulating."—*Judy* "My outside reading has been affected . . . I'm more likely to pick up a book on architecture." —*Jim*

As teachers they have felt more "creative," "inventive," encouraged to keep developing ideas and thinking of new possibilities, particularly during the second year of their participation in the program. "In the second year I was less concerned with the terms and more concerned with the general impression of houses and how they fit into the period."—*Jim*

The field coordinator agreed: "[They] feel more at ease, able to take it and see what works, re-structure their course, play with it more . . . more interested in the concepts, exploiting content, making ties . . .etc."—*Greer* Judy and Jim also felt they had gotten to know students in different ways, more fully, because of the program, and gained more understanding of their backgrounds in the community. "We often meet and talk with people while out on walks and we have been invited into some homes."—*Judy*

Extensions Outside of Class

The school administration has been supportive and interested, excusing Jim and Judy from supervision duties, making it possible for them to have back-to-back preparation periods to take maximum advantage of Greer's visits, arranging time for them to attend workshops, give presentations, etc.

Pressure from Propositon 2½ has meant that teacher-colleagues at Stoughton High have not shown as much interest in the program as they might have under more secure conditions and, at times, a few teachers indicated some resentment at Judy and Jim's release from supervisory responsibilities. Some teachers have, however, used some of the architecture slides, introduced the subject matter in other courses, brought articles and notices to the attention of Jim and Judy, and asked them, on occasion, to talk to their classes about a particular style.

Outside of the high school, developing the course has quite definitely extended the professional lives of the two teachers who have, individually or as a team, given a number of presentations and workshops to professional groups in the community and state.

Responsiveness of Design

The concept, presentation and support system for the *Architectural Heritage Education* pilot can be attributed to the central staff. The staff meets regularly, keeps close touch—through the field coordinators—with implementation at the various sites and has kept voluminous, detailed documentation of each project (the demands of the documentation even appearing, at times, somewhat of a burden to participants).

On the whole, organization has been exemplary, "keyed into the needs of teachers and students . . . better organized and more supportive [than other outside-funded programs] . . . the key is the AHE people, they are organized before they come to the school."—*Jim* "I have never seen people so clued into what teachers need."—*Judy* "I would like to emphasize the soundness of the AHE involvement, particularly the field coordinators." —*Jim* The staff is unusually thoughtful, sensitve and knowledgeable about the field of architecture and social history.

The Future

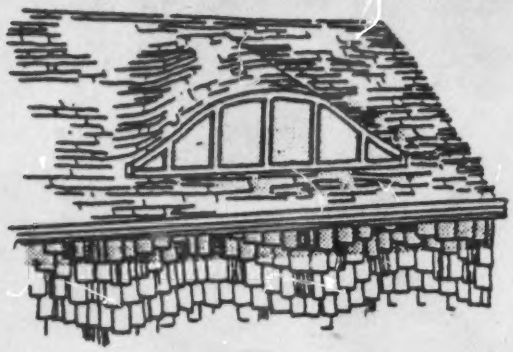
What can be expected after this highly organized, competent support for planning and help with resources has ended? The two teachers at Stoughton High feel optimistic about their own case. They now have the knowledge, experience and materials and expect to carry on. "It is something that will stay with us."—*Jim* The field coordinator agrees. "It has changed teachers for ever and ever. Everybody will go on doing what they've been doing, using slides, being creative, innovative."—*Greer*

Students' awareness, too, has probably been permanently changed. "It's become a part of them . . . kids accept it, internalize it . . . it's no longer a weird thing but part of American culture." —*Greer* "They will forget the styles but they will continue to appreciate differences in architecture and to see how these reflect what was happening in them."—*Jim* "They see more value in keeping the environment versus tearing it down or trashing it on the weekend." —*Jim* "I'd let them know we wanted to keep our heritage and anything that was old that could show Stoughton's history and important stuff like the railroad station and things like that." —*Student*

CONCLUSION

Architecture as a tool for learning has the special characteristic of being both concrete and symbolic (to say nothing of ubiquitous). Examples of old buildings in towns like Stoughton stand as physical evidence of past technology, availability of materials, financial resources, artisans' skill. At the same time, the building styles can be associated with the spirit or ethos of an age.

For young adults moving into formal operations (in Piagetian terms) or abstract thinking, architecture seems a particularly suitable choice for approaching other school subjects. In addition to all the benefits listed above which help break down the barriers between school and the outside world, architecture can provide a stepping stone to mature thinking, assisting the individual to make connections and move from the specific to the general, a cognitive progress which will help young people become thoughtful, responsible adults.



PART TWO
TEACHER RESPONSE: INTERVIEWS

DESCRIPTION

Eight second-year teachers were interviewed.* The courses into which these eight teachers integrated architecture were:

Social Studies: U.S. history (3); American studies (1); introduction to social studies (psychology/economics) (1); modern European history (1); psychology (1)

Art: studio art/art history (1)

Industrial arts: architectural drawing (1)

Language arts: English (2)

Course formats, pedagogical techniques (lecture, discussion, hands-on experience, etc.), timing and specific content were left to the decision of the individual teachers.

There were certain commonalities in the experience of the eight teachers: they participated in the summer course taught by the staff and received on-site field assistance; they had all been in the program for three semesters at the time of the interviews; and they had been using architecture and slides of buildings in their local community in some way to make connections between ideas and values in various periods and cultures, and to summarize and reinforce course material. They varied in whether architecture was used to introduce units, as transitional material or as a subject in itself —as well as, of course, in the actual subjects taught.

During their first year with the program (1980-1981), these teachers averaged 15 full class sessions per semester using architecture; for non-studio courses (social studies, language arts) this average was 11 sessions/semester. During their second year (1981, fall semester only) the average for the entire group was 11 full class sessions per semester.

The group of second-year teachers was chosen to be interviewed because they had benefited more than the preceding group from a refined summer course, yet were in the program long enough to develop and more fully implement their ideas, than were the teachers in the succeeding or third-year group.

Six interviews were conducted over the phone and two in person. Interviews lasted 1½-2 hours. Their focus was on how the teachers were affected by their participation in the AHE program. (See Appendix for interview questions.)

PROGRAM OUTCOMES

Outcomes for Instruction

There are several dimensions to the responses teachers gave to questions on the characteristics of architecture that enhance teaching:

Architecture can tell a story and buildings are *tangible representations of history* and change.

"Now we use the built environment as something that can be interpreted and read. I was never aware that it could be used that way or maybe I just didn't have enough expertise."

"It is a good way to review history. One of my own interests is the history of family and roles. The interiors often reflect those changes in roles."

"People wear their houses as they wear their clothes. Architecture reflects our values and moods. Styles change as do clothes and we are affected by them."

**A ninth teacher, who is not part of the second-year group, was also interviewed by telephone to test the appropriateness of the questions.*

Importance of using local examples of architecture. These examples not only make the content more real to the students but also make the material more personal and accessible for many students. This was evidenced by heightened student interest and involvement.

"The kids become very responsive to the local examples. If you want to see a sudden change, you deal with something in a general way and then all of a sudden, the Bay Bank of Winchester comes up. They really talk about the local examples."

The visual aspect of architecture adds a dimension to teaching.

"What it can do is to make the kids more aware that history is not just something in a book . . . They can see it . . . it allows you to draw parallels with things they can see . . . The visual element has had an impact. It helps kids to carry things with them."

". . . there is a system of analyzing a house. The visual literacy teaches a method of analysis. It has increased my ability to analyze and relate to context and social events. I had used visuals quite a bit but always telling something, rather than requiring students to analyze and compare and contrast."

Integrating and enriching material through time and across disciplines.

"A particularly successful lesson was one where we used Gothic Revival *and connected it to the Romantic movement in literature and historic time frame. They were able to see connections between what they were reading, the historic movements and literature."*

"When we finish, they have a much better understanding of how it is an art form and they can relate it to the rest of the world politically, socially . . . They often relate it to things they have studied in other subjects."

Equalizing effect. While students vary in their abilities and interest, no one is an expert in the area of architecture. Teachers and students alike can draw upon personal experience. This not only influences student participation but, in some instances, the relationship between teacher and student.

"It is the kind of material where you don't have to know anything about styles . . . the kids just have to have an opinion. It is an advantage for kids who may have less ability or have difficulty talking about things. And it enhances kids who talk easily. It can be used as an initial thought starter or for participation or for more profound discussion."

"I found last year and this year especially with the 9th grade [varying abilities] that everyone can participate and not feel threatened. The kids last year who had difficulties . . . architecture was an area where a number of kids really came into their own."

Individualization. One teacher said he found the use of architecture contributed to his ability to individualize instruction.

> *"I think you have to recognize that people learn different things in different ways. It provides more avenues . . . I look for more in kids than I did before . . . I used to teach a course in independent study without a book —kids did projects. I miss that kind of thing. Architecture is helping me get back to this—it opens up vistas for these kids."*

Outcomes for Students

Teacher views of the ways that architecture enhances teaching are also reflected in how they described student responses to architecture. For a lesson to be considered successful teachers reported there has to be evidence of student interest and involvement.

Student Response

While teachers experience varying degrees of interest among students and classes, there was general agreement that, when carefully introduced, architure in most cases heightened interest and involvement.

> *"I have seen a tremendous difference in their projects. It has opened up many new areas for yearly projects —building a model, designing period and futuristic buildings not just contemporary . . . I see more intelligent questions being asked . . . more interest . . . they can talk about house styles. It is a problem getting them to bring out creative ideas of how to design . . . they are going crazy now using local styles. It is bringing out a lot of creativity in these kids . . . In so many classes, projects are assigned out of a book —it is not allowing for any creativity. It is meeting the kids needs individually."*

> *"I didn't expect the kids to get as excited about it as they did. They are always coming in and talking about what they've seen . . . I judge success by the discussion among the kids. That's where you justify the use of architecture. It enhances, accents the points you're trying to make."*

> *"I never anticipated the high student interest and involvement . . . There is more student involvement because everyone can read a building. The students have brought in pictures from home and newspaper clippings—there is a carryover so that they think about it outside of class. Students also come in and make comments about buildings they have seen . . .The students will tend to give me better writing examples when it is related to architecture."*

Changes in Student Involvement

There were no clear patterns as to the type of student that is most interested in the architectural material. As described earlier, the use of architecture does have an equalizing effect in classes with heterogeneous ability grouping. Several teachers did report examples of changes in student involvement.

> *"I had a student last year . . . there was a lot of family pressure to excel but he was into screwing around. Last year when I introduced AHE he really flew—he was very excited and involved. I have a girl who is very artistic but cannot draw mechanically. After the introduction to styles, she was very interested in Victorian houses. She is doing a mechanical perspective sketch of a Victorian house she designed herself."*

> *"A boy who doesn't score very high—who does average work—did a balsa wood reproduction of a First Period house. He didn't do well on the exams but when he used the ideas in his house, he met with such success there was an almost overnight change. He is now working on a 12-foot mural. He has a new self-confidence and is going way beyond what he was doing.*
>
> *A girl who came back from a school in Boston where she is studying interior design said what a difference it had made to her, personally and school-wise."*

Caveats: There were also a couple of cautions by teachers:

> *"There are some kids who aren't interested. In one class I stopped teaching it—they were not interested—it is a lower level class."*

> *"The word 'architecture' makes them yawn—that is the first thing to overcome. It is [only] a small problem to convince them of the value."*

Outcomes for Teachers

When asked how being in the program affected them as teachers, a major theme in the responses was renewal.

> *"It is a constant stimulation to me as a teacher by requiring something more of me to be creative, inventive—it is a new aspect—there are a lot of new possibilities. It has put demands on me to continue developing ideas."*
>
> *"It has brought the Industrial Revolution home to me—it has made me read more about local people and history. It makes me more enthusiastic—it rubs off on the kids."*
>
> *". . . it came at a time in my career when it helped me recharge my batteries."*

Several teachers report that their personal lives have been directly affected as a result of their involvement.

> *"I really appreciate any community that I drive into now—gives me more pleasure in my leisure hours. It has enriched my life and has really helped me in terms of my own sense of history."*
>
> *"My outside reading has been affected. I read more on the history of architecture . . . I spend more time looking at communities."*
>
> *"I have two younger children that are very conversant on the subject. They have become very informed about the styles. They pick it up as easily as the high school students and adults. The kids have become very interested."*

Asked how they would describe the balance between their output of time and energy on this program and the returns they have gotten from participating, all of the teachers feel that they have gotten back as much or more than they have put into the program. Their sense of themselves as competent professionals benefitted particularly from being given the freedom, encouragement and support to integrate architecture into their courses in their own way. No lesson plans were given out and the creative ability of each teacher was respected.

Extensions in School and Community

Teachers greatly valued the interest and support of school administrations. There were no instances of teachers reporting lack of administrative support.

The useful exchange of ideas and information with colleagues, initiated during the summer course, continued to varying degrees throughout the school year. The most exchange was with other AHE teachers. In one instance, two teachers from different communities exchanged class lectures in each other's schools.

When asked about dissemination within their schools, every teacher reported that some other teacher had shown an interest. At least seven of the teachers have done some sort of *formal* exchange, from presentations in other teachers' classrooms (6), to teaching other teachers and loaning them slides (5). In one of these cases the AHE teachers conducted an inservice program for 40+ teachers within their school system.

Informally, five teachers have shared information in "good discussions" and two, even reported that non-AHE teachers had brought them articles and pictures.

While interest on the part of other teachers was characterized as "positive," there was some disappointment that it had not been greater. One teacher reflected that 2½ has resulted in some teachers pulling back and not wanting to put out extra energy. While another mentioned experiencing some envy from colleagues.

Teachers reported an increased awareness and use of the community as a resource. Those teachers who had previously used the community described an increased use and awareness of community resources. For other teachers there was a new awareness of how the community could be used in teaching. Teachers also took advantage of historical groups, public libraries, the town halls, local and area museums and community Bicentennial material.

They talked about the range of styles available to them right in their communities. It was an advantage to have a range of styles represented, particularly if they were within walking distance. Teachers varied considerably in how often they took field trips. These differences based on: size and scheduling of classes, teacher interest and time, and availability of styles within walking distance.

In many cases the community became more aware of these teachers and their use of local architecture through teacher presentations for community liaison meetings and other local community groups, and through interactions with teachers and students on local field trips. One teacher displayed student work in the town hall and public library;

and in one school, the AHE teachers taught an adult education course on architecture. For some teachers, increased visibility has resulted in community members offering them historical material. In turn, teachers are sometimes seen as a resource and asked to make presentations to local groups.

PROGRAM ELEMENTS

Summer Course

Quality of course: The summer program was described by all of the teachers as a stimulating learning experience.

> *"No way could you come away without appreciating the amount of preparation and the scope of the material. There was clearly a big investment in putting this together. I saw it as an advanced course in architectural history . . . It was kind of like being at a banquet and having your fill. There was a good feeling at the end. I have seen very little in other course work that equaled it."*

> *"The quality of the workshop—it was so well prepared and organized. You really got excited because they were so knowledgeable."*

> *"[In response to what was most beneficial] learning how to look at a building, recognizing basic vocabulary and clues. The series of discussion groups on ways to integrate the material. We talked about concepts, then everyone could think about specifics."*

> *"It was an excellent group—a super two weeks of learning. We developed a special bond between the teachers and staff."*

Staff and participants: There was opportunity for exchange both with a staff described as competent and as good listeners, and with other teachers from across the state and from different disciplines.

> *"Working with seven other individuals from other disciplines was important—that collective exchange. They happened to be people who were honest and had a tremendous sense of humor. I am interested in what other teachers think and do . . . The mix of people was rewarding . . . The staff were alert and bright. They were and still are good listeners. They have a marvelous sense of humor, their enthusiasm, their knowledge and scholarship —and they suggested to you that you had something to offer. They did not talk down to you."*

Responsiveness of planning: When asked what changes they would make in the summer program, half of the teachers responded that they would have liked more information on interiors. The AHE staff responded to this interest of teachers by providing a session on interiors at a later meeting for teachers.

Other suggestions —most of which were addressed in the year-three course—were more on modern architecture, more on-site work, more on home technology; de-emphasize the technical aspects and personalize the material more; and less thorough evaluations. One teacher's suggestion that it would be helpful to include more slide examples of architecture from the communities of the participants was also responded to.

Course as preparation: The quality of the summer program is reflected in the enthusiasm and preparedness that teachers felt when it ended. For some teachers there was also a sense of uncertainty as to how to best use the information they had learned.*

> *"I learned the materials very well from the summer, so it was easy to use."*

> *"I was fired up. The summer program was two weeks before school started. They had planned to hold it in July but the good thing about it being in August was that two weeks later you were teaching. I was prepared to begin right away. Time was built into the end of the program to plan what we were going to do."*

> *"I felt like I had learned a hell of a lot that I could use. I was still somewhat unclear as to how I would do it."*

> *"I had some anxiety about how to do things; but there was also a certain enthusiasm. I would really describe it as a euphoric experience. I really started the year high—ahead of the kids, and had to slow down; but it helped me get started. The summer program was late in the summer—just two weeks before school—maybe that wasn't so good."*

> *"I was walking on air and couldn't wait to get started. Ideas were popping in my head."*

**Pre- and post-tests administered during the 1980 summer course showed a gain of 27% (from an average of 64% correct to 91% correct) in recognizing architectural styles, architectural vocabulary, and assigning date periods to architectural styles.*

On-site Follow Up

The on-site follow up built into the program and provided by the field coordinators was critical in sustaining teacher interest and ability to effectively develop ideas on using architecture in teaching.

The field coordinators not only provided valuable information, but they also took slides of local buildings. Important to most teachers was the stimulation of discussing ideas and planning curriculum.

> *"The sense of support that I got from him. He was interested, encouraging. He got information for me. We could discuss anything and he had a good sense of humor. He would keep me on my toes by asking me questions and disagreeing with me when he felt it was called for. The field coordinator is perhaps the most important staff member in the developing program."*

> *"She takes all the local photographs and gets examples from other communities along with finding books. She helps keep our attention focused on continuing to develop the material. She helps us with the materials, ways to approach. She got to know our students . . . She has been a big help in getting materials. It was very important that she could help us get started with local pictures—there weren't enough hours to get those. When starting a program, the harder it is to get the resources, the harder it will be to continue."*

Further evidence of teacher satisfaction in their interaction with the field coordinators was that no suggestions were made for changing this role. Teachers saw less of the field coordinators in the second year because of the increased number of teachers the field coordinators were visiting during the third year of the program. However, they also indicated that there was less need for these visits even though some missed the stimulation of the exchange.

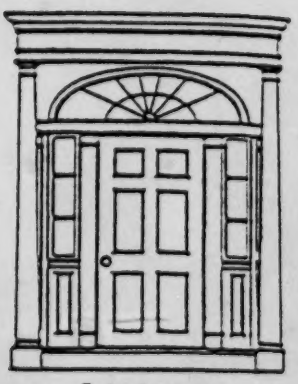
In their interviews, the field coordinators suggested that having time to spend sitting in on classes in some cases enhanced their collaborative exchange with teachers. The most frequently mentioned drawback of being involved in AHE was the paperwork associated with documenting and evaluating lessons as part of the program's formative evaluation.

Implications for the Future

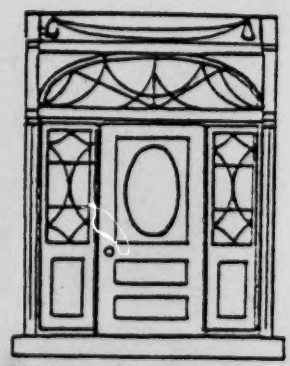
All of the teachers felt certain that they would continue to use architecture in their teaching. Many were comfortable with what they had developed during their first and second years and planned to continue using these lessons. Several teachers also talked about continuing to refine and expand their inclusion of architecture studies.

The importance of the initial course and frequent interactions with the field coordinators in the 1st year was seen as critical toward helping establish a foundation from which teachers could continue to develop ideas.

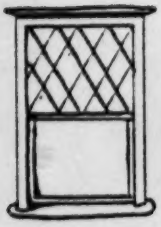
Many of the teachers are contributing to efforts to organize a support group of interested AHE teachers that will continue to meet next year for the purpose of exchanging ideas and materials and disseminating the concept of using architecture as a teaching resource.



Federal entrance



Colonial Revival entrance: wider fanlight and sidelights—central door with oval glass



PART THREE
TEACHER RESPONSE: QUESTIONNAIRES

DESCRIPTION

Questionnaires were sent to fifteen other program participants to corroborate the findings of the interviews; fourteen of these were returned.*

The original group of eight teachers were assigned to the project by their school administrators in late spring, 1979. (It should be noted here that voluntary participation in the project characterized the other teachers, in contradistinction to this group.) Their fields were:

Social Studies: U.S. history (4); local history (1); government (1); world history (1); economics (1)

Art: studio art (all levels) (4); photography (1); art history (1).

By the time they received the questionnaires, this group of teachers had been in the AHE project for five semesters. (Note: one of these teachers was never able to attend the summer course.)

The most recent group of participants, who joined the project in 1981, had had one semester of experience with AHE when they completed the questionnaire. Their fields were:

Social Studies: U.S. history (5); ancient history (1)

Art: studio art (1); photography (1)

Language Arts: American literature (1); world literature (1); Urban Readings (1)

Except for length of time in the program and variations in their use of architecture, all of the respondents had roughly the same commonalities as the teachers interviewed.

They, too, participated in a summer course and had on-site field assistance, and were encouraged to adapt the study of architecture to their own subjects, teaching styles, demands of the particular setting.

Teachers varied widely in how often they used the architectural subject matter in their courses, from daily, twice a week, once a week, to about ten times a year, depending on the type of integration.

As in the interviews with second year teachers, the questionnaires focused on how participation in the AHE program affected the teachers personally and professionally.

However, the questionnaire was designed *after* the interviews were completed, so that the multiple choice questions could be guided by interview responses. This explains why their tone is mainly positive, as they were chosen to corroborate interview findings. There were only a few open-ended questions included on the questionnaire.

To fully understand the letter coding and the results reported below, refer to the questionnaire form, itself, in the Appendix. It should be understood also that graphs represent weighted responses, not absolute numbers; their significance is thus relative rather than directly representative.

**The sixteenth teacher was part of the group that was interviewed; results of this interview are included in Part Two.*

PROGRAM OUTCOMES

Outcomes for Instruction (questions 4 & 5)

Of 11 possible characteristics of architecture suggested by interviewed teachers all were checked by questionnaire respondents. The most common responses (adjusted for double-checking) were:

Buildings express our history	††††††††††††††††††
It is visual and therefore tangible	†††††††††††††
A way to pull together ideas, etc.	†††††††††††††
Readily available	††††††††††††
Expressive of cultural values, ideas	††††††††††††

Comments on what architecture can contribute to other disciplines: that it's enjoyable, enriching, increases student interest in local history, motivates, equalizes student performances, exciting, encourages new insights.

Comments on what it cannot contribute: can't stand as substitute for reading, verbal comprehension, for study of history by itself; also it can't solve everyday teaching problems, provide simple solutions to "teaching in today's classroom," make everybody like history, "make me a better teacher."

Outcomes for Students (question 3)

Of 13 possible positive outcomes listed for students by interviewed teachers, 11 were checked by questionnaire teachers. The most common responses (adjusted for double checking) were:

i. greater pride in own community	†††††††††††††
b. increased interest, awareness of local history	†††††††††††††
h. more equal basis of participation	††††††††††††
g. better connections within subject matter	††††††††††
c. encouraged to do own thinking	††††††††††
f. more interested than teacher expected	†††††††††

Outcomes for Teachers (questions 1, 2, 6, 11, 12, 13, & 14)

All the possible positive outcomes from participation in the program noted by interviewed teachers were checked on the questionnaire. The most common responses (weighted according to priority given) were:

j. own sense of historical, aesthetic development	†††††††††††††††††††††††††
c. helped make connections, unify material	†††††††††††††††
a. sense of renewal	††††††††††
i. personally enriched life	††††††††††
b. visuals improved quality of teaching	†††††††††
f. increased exchange with colleagues	†††††††††
g. more creative in developing curriculum	†††††††††

Comments on aspects of the program most satisfactory for teaching: fresh ideas, knowledge, learning; students' positive interest and response (the most common comment).

Least satisfactory for teaching: some students' negativism/resistance; paperwork, scheduling and time problems, lack of expertise, unnecessary "close scrutiny" by field coordinator (a new teacher); difficulty of integrating into other subjects.

Comments on balance between output of energy and returns from program: ten of the respondents felt the balance between output of energy demanded by the program and the returns from it were on the positive side; one thought the balance equal; the remainder did not express an opinion.

Teachers in the program for three years agreed, with one exception, that during their first two years they used architecture most successfully, because of "better students," "special course," "closer ties to staff."

PROGRAM ELEMENTS

Summer course (question 10)

A. Stimulated interest in architecture	tremendously	†††††††††††
	very much	††
B. Developed understanding of connections	tremendously	†††
	very much	††††††
	fair amount	††
	a little	† (an art teacher).
C. Prepared to design curriculum for course	tremendously	††††
	very much	††††††
	fair amount	†
	a little	†† (including 1 art teacher)

On-site Follow-up (questions 8 & 9)

Respondents ranked the four ways listed in which field coordinators assisted them (weighted by priorities):

As a resource for knowledge on architecture	†††††††††††††††††††††††
Taking slides	†††††††††††††††††††
As a sounding board for discussing ideas	†††††††††††††††††
Doing research on the community	†††††††††††††††

Half of the respondents said they would not change the role of the field coordinators in any way. Suggestions for changes included: coming more often, closer ties second and third years (three-year teachers) coming less frequently, less scrutiny (one-year teacher), less paperwork, more time for classroom work, more advice on curriculum.

Implications for Future (questions 7)

Of the eight teachers in the program only one year, all agreed that they would continue: "will increase [time given to architecture]," "can manage," "will remain," "no problems foreseen,"; but five said they would miss the field coordinators and staff. Teachers who had been in the program three years said they were "still excited by it."

Further comments (question 15: open)

All responses were positive: "Bravo! [about central staff]," worth the government spending, valued people met, would like continued support.

SUMMARY

Positive Outcomes

We will summarize here some of the significant positive outcomes of the *Architectural Heritage Education* project which were described at greater length in the preceding pages of this report. We see these outcomes as being closely interdependent.

Benefits for teachers

professional:
- sense of renewal
- increased self-respect as curriculum designers
- new ways of teaching

personal:
- new interest, awareness, knowledge
- broader acquaintance among colleagues and community
- closer relationships with students

Benefits for students
- increased involvement, responsiveness
- cognitive and academic gains
- breaking down of barriers between in-school and out-of-school spheres
- equalization among students of varying academic ability
- closer relationship with teachers
- personal sense of history and appreciation for community

Benefits for community
- exchange with schools, teachers and students
- use made of resources, groups, individuals
- addition of new research and student interest in local context

Factors in program responsible for outcomes

The success of the *Architectural Heritage Education* pilot project can be attributed to several groups of factors:

Richness of the subject matter itself, architecture; its general availability, developmental appropriateness to high school students, adaptability to a variety of disciplines

The teachers' enthusiasm for the subject of architecture, their willingness to be learners as well as teachers, their initiative, energy and strong personal commitment to the project

The responsive, evolutionary design of the project itself; the fact that teachers were respected as designers of curriculum and contributors to the overall planning of the program

Expertise, competence and conscientiousness of the central staff, including the field coordinators, project director and materials developer

Implications for the future

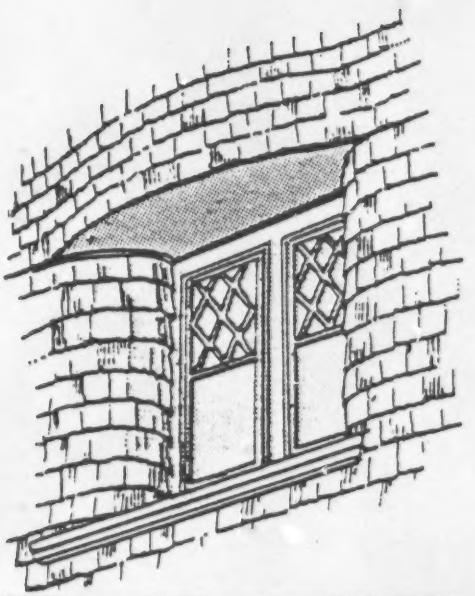
For those teachers who have experienced the *Architectural Heritage Education* pilot project —attended a summer course, received classroom support, had an opportunity to help shape the project — continued use of architecture in their high school courses seems assured. Although the support and contacts will be missed, teachers expressed confidence in their ability and desire to carry on.

It is clear, from this report, that architecture as a teaching tool has great potential for high school instruction in general, independent of the location and particular character of the school. However, a basic course and some form of on-site support for ideas, materials, and feedback seem indicated.

The benefits derived during the pilot phase justify an energetic investigation of the means necessary for further dissemination of the concept of teaching with local architectural resources.

Summary statement

The *Architectural Heritage Education* pilot program has been an outstanding example of teacher in-service education; one which points the way, backed by experience and success, to a significant potential for high school education.



APPENDIX

ARCHITECTURAL HERITAGE EDUCATION TEACHERS, COMMUNITIES AND COURSES

Belchertown
Belchertown High School
- Shaun Bresnahan—*U.S. history*
- Robert Hansbury—*U.S. history*

Concord and Carlisle
Concord-Carlisle Regional High School
- Andrei Joseph—*U.S. history, Economics*
- John Langan—*Art Workshop, 3-D Art*

Hampden and Wilbraham
Minnechaug Regional High School
- Stephen Castonguay—*Introduction to Social Studies, Modern European history, Psychology*
- Joseph Van West—*Art III, IV*

Lexington and 16 Metropolitan Boston communities
Minuteman Regional Vocational-Technical
- George DuGuay—*Urban Readings*
- Jack Mayer—*American Literature, World Literature*

Lowell
Lowell High School
- Joan Hancock—*Art I, III, Art history*
- Charles Hill—*Lowell history*

New Bedford
New Bedford High School
- John Borowicz—*U.S. history*
- Frederick Cole—*U.S. history*

North Adams
Drury High School
- Robert Dean—*U.S. history, Ancient history*
- John Horahan—*Principles of Art, Photography, Exploring Media*

North Brookfield
North Brookfield High School
- Eugene Caille—*U.S. history*
- Louis Hyde—*U.S. history, government**

Northbridge
Northbridge High School
- Paul Kosciak—*U.S. history*
- David Papazian—*U.S. history*

Stoughton
Stoughton High School
- James Gormley—*American Studies*
- Judy Hamilton—*American Studies, English I, III*

Winchester
Winchester High School
- Ralph DiBona—*Architectural Drawing*
- William O'Connor—*U.S. history, Ancient history*

Worcester
Worcester North High School
- Leon Hovsepian—*Worcester's Architectural Roots, Art Studio***

Worcester South High School
- William Woodfin—*U.S. history, World history*

*currently *North Brookfield Junior High School*
**currently *Burncoat Junior High School*

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AHE TEACHER INTERVIEW

January, 1982

Developed by Nancy Miller in Conjunction with Lesley College

1. How did you first hear about the AHE program?

   a. Once you became involved in the program, what were your expectations as to how it might benefit you?

2. The next question is a very broad one but I would like you to think about how you have been affected as a teacher as a result of being involved in this program. For example, can you describe ways that you have changed in terms of:

   - curriculum
   - your own subject matter
   - the way you view your discipline
   - presentations of material
   - interaction with students
   - your role/involvement in the class
   - exchange with colleagues
   - community involvement

   a. What have been the major problems you have run into when trying to integrate architecture with your curriculum? How have you dealt with these?

   b. Have there been outcomes that you did not expect? Describe these.

   c. Comparing your first and second years in the program, have there been differences between how you have used architecture in your teaching?

   d. Have there been any changes in your thinking as to what architecture can or cannot contribute to the teaching of your discipline?

   e. Are there ways that you have personally changed as a result of this program? Could you describe these? How have any of these affected you as a teacher?

   f. How you made use of your knowledge of architecture in other ways?

      - to other audiences
      - for your own purposes

3. Describe a particularly successful project or lesson that you did using architecture

   a. What has to happen for you to consider a lesson a success?

   b. What contributes to making it a success?

      - planning
      - resources
      - presentation
      - the topic

4. How describe a project/lesson that was not so successful.

   a. If you were doing it over, what would you change?

5. Have there been projects/lessons that you wanted to do but were unable to do?

   a. What would have helped to make this/these happen?

6. Let's turn now to changes you have observed in your students that are related to the introduction of architecture into the curriculum.

   Can you describe examples of how the projects/lessons have affected your students either individually or as a group?

   - understanding of subject matter
   - interest level
   - quality of work
   - involvement
   - group interaction
   - questioning
   - student involvement in architecture outside school
   - patterns in questions they ask

7. If you were describing your experiences to another teacher or interested person, how would you describe the characteristics of architecture as a subject that enhances how or what can be taught?

   a. If no answer: what have been the most important outcomes from using architecture in your teaching?

8. Given the many demands on teachers, how would you describe the balance between your output of energy and time on this program and the returns you have gotten from being in the program.

   a. Have you been involved in other, similar programs? How would you compare your experiences?

9. Think about the training and resources provided by this program.

   a. Let's begin with the summer program. What aspects of the summer program do you remember as being most beneficial to you?

   b. Do you recall how you felt when the summer program ended? (For example, prepared to begin, unprepared, confused...)

   c. If you were involved in planning a summer program for a new group of teachers, how would it be different from the program you experienced?

10. How let's turn to the role of the Field Coordinators. What are the most important ways that they are a resource to you?

    a. Have there been times that they have been unable to be a resource to you? What were the reasons?

b. Would you change their role in any way? How?

c. Is there anything you would like them to do more often?

11. Are there other resources in the program or in your own setting which may have influenced what you are able to do? For example,

a. Are there people in the community who have influenced what you are able to do? How? (community liaison group)

b. Have other teachers affected in any way what you have been able to do in your classes?

c. How has the administration affected what you do?

d. Have there been other resources that have affected your use of architecture?

12. What has been the value of designing your own lessons vs. being provided pre-planned lessons?

13. Even though the official program will end this year, when you think about the ways you have used architecture in your teaching, what are the most important things you want to continue doing?

a. How will the ending of the program affect your ability to continue these things?

b. Are there resources in your own setting that will be available to you? (Mention any named earlier.)

14. Do you have any thoughts about how the teachers who have been involved in this program could be a resource/support to each other after the official end of program?

15. In summary, is there any one result of your being in this program that you would particularly like to emphasize?

16. Is there anything you would like to add to this interview; something important to you that we have not covered.

March, 1982

Interview Questionnaire for Architectural Heritage Education Teachers

1. Listed below are several possible outcomes that you as a teacher may have experienced as a result of your being with the AHE program. Please check only those that have been most important to you and add any important outcomes that are not listed.

___ a. As a teacher, it has given me a sense of renewal.
___ b. Using visuals improves the quality of my teaching.
___ c. It has helped make connections and unify the material I teach.
___ d. My involvement in the community has increased.
___ e. It has contributed to my trying a greater variety of teaching approaches.
___ f. My exchange with colleagues has increased.
___ g. It has allowed me to be more creative in developing curriculum.
___ h. The school has benefited from the public relations generated from the program.
___ i. Personally, it has enriched my life.
___ j. It has helped me in terms of my own sense of historical and/or aesthetic development.
___ k. Other_____

Note: If you checked more than three items, please go back and prioritize your choices--use #1 for most important, 2 next, and so on.

2. Please identify by letter any of the above which you would consider important secondary outcomes to you as a teacher.

___ ___ ___ ___ ___ ___ ___

3. Below are several possible outcomes that your students may have experienced as a result of your use of architectural material. From your observations please check those that most accurately describe your students' response.

___ a. When using architecture, the quality and frequency of discussion in my classes is improved.
___ b. The students show an increased interest and awareness of local history.
___ c. It encourages students to do more of their own thinking.
___ d. The subject matter I teach becomes more tangible and real to the students.
___ e. The barrier between teacher and students is broken down and a more open exchange is possible.
___ f. The students are even more interested than I expected.
___ g. The architectural material helped students to integrate and make better connections between different aspects of the subject matter.
___ h. The students participated on a more equal basis without feeling threatened.
___ i. I see evidence of the students showing a greater pride in their own community.
___ j. The kids get out into the community.
___ k. The kids get more involved with community residents of different generations.
___ l. It encourages student creativity.
___ m. Other student outcomes: _____

Note: Please go back and put a second check next to the outcomes you feel were most educationally significant for the students.

4. Which of the following best describes the characteristics of the subject of architecture that contribute to the outcomes you have identified above.

___ a. Architecture is readily available--we are surrounded by buildings.
___ b. It is easy to use--all you have to do is look at what is around you.
___ c. It is inexpensive--you can do walking local field trips.
___ d. It is visual and therefore tangible, not abstract.
___ e. It is familiar--people see and experience buildings everyday.
___ f. Buildings express our history--how people used to live, how a community grew.
___ g. A building's design expresses cultural values and ideas. It illustrates how people respond to the world around them.
___ h. It represents a way to pull together or connect certain ideas, certain themes, certain events, or certain facts.
___ i. It facilitates a system of thinking--a way of looking at and analyzing things.

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__ j. It is different--something new.
__ k. Other. _____

Note: Please go back and put a second check next to those characteristics that you feel are most educationally significant.

5. From your experiences, what do you think architecture can or cannot contribute to the teaching of your discipline?
It can _____

It cannot _____

6. FOR THOSE OF YOU IN THE PROGRAM THREE YEARS, please circle the year in which you think you used architecture most successfully?
1st year 2nd year 3rd year

a. The reasons for this are _____

7. FOR THOSE OF YOU IN THE PROGRAM ONE YEAR, please describe how you think the ending of the official program will affect your continued use of architecture?

8. Please prioritize the descriptions below in terms of the most important ways the Field Coordinator assists you. (Most important is #1)
__ Taking slides.
__ Doing research on the community.
__ As a sounding board for discussion ideas.
__ As a resource for knowledge on architecture.
__ Other. _____

9. Would you change the role of the Field Coordinator in any way? If so, how?

10. Please use the appropriate letter -- a. tremendously b. very much c. a fair amount d. a little e. hardly at all -- to rate your summer course experience in terms of each of the following, for you:

- it stimulated my interest in architecture (circle one)	a	b	c	d	e
- developed my understanding of connections between architecture and my subject area	a	b	c	d	e
- it prepared me to design architecturally-based curriculums for my course	a	b	c	d	e

a. The reasons for the above ratings are _____

11. Thinking about your use of architecture in your teaching:
a. What has been the most satisfying?

b. What has been the least satisfying?

12. Given the many demands on teachers, how would you describe the balance between your output of energy and time on this program and the returns you and (your students) have gotten from being in the program?

13. Please briefly describe the primary ways you have used architecture in your teaching. (For example, as a unit for a certain number of consecutive days, integrated into ongoing curriculum, as transition material between my regular units, through field trips...)

14. Also, please indicate how frequently you use architecture in your teaching. (e.g. average number of class sessions per week? semester?)

15. Is there anything important to you relative to the AHE program that we have not covered? If so, please add your comment.

FIELD COORDINATOR INTERVIEW

1. Describe the ways that you assist teachers in developing uses of architecture.
   a. Which do you spend the most time doing?
   b. Of all the things you do, which do you think are the most important to the teachers?
   c. Which are the most important to you?
   d. How do you know when you have worked successfully with a teacher? What has to happen?
2. What are the major differences in the way you work with first/second/third year teachers?
3. What do you think are the most important qualities a teacher needs for this program?
4. Are there things you have wanted to do in your role as Field Coordinator but have been unable to do?
5. From your experience, what are the advantages of having teachers develop their own lessons? The disadvantages?
6. What are the major problems that teachers have in integrating architecture into their curriculum?
7. If designing a similar program, how would you change the role of Field Coordinator?
8. Could any of the things you do for teachers be done either by them or someone in their own setting.
9. What have been the most important outcomes for teachers from the use of architecture?
   a. For students?
10. What are the characteristics of architecture that contribute to these things happening?
11. Have there been outcomes that you did not expect?
12. What kind of exchange have you seen between the AHE teachers and others in the school?
13. Is there anything about the kind of school or setting where the AHE material is best utilized?
14. What do you think will be the most lasting effects of the program?
15. How have you been affected by being involved in this program?

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FIELD COORDINATOR INTERVIEW